AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the Application.

Claim 1. (Previously presented) A method of operating a communication system to reduce echo of a narrowband first signal in a wideband second signal, the method comprising:

receiving the first signal having spectral components within a first frequency band;

accepting the second signal having spectral components in a second frequency band comprising the first frequency band and having spectral components extending beyond the first frequency band;

removing a modified version of the first signal from the second signal to produce a third signal; and

processing the third signal based upon a level of spectral components of the second signal extending beyond the first frequency band, to further reduce echo of the first signal in the third signal.

Claim 2. (Original) The method of claim 1 wherein the first frequency band comprises from approximately 0 Hz to approximately 4 KHz.

Claim 3. (Original) The method of claim 1 wherein the second frequency band comprises from approximately 4 KHz to approximately 8 KHz.

Claim 4. (Original) The method of claim 1 wherein the first frequency band and the second frequency band are essentially non-overlapping.

Claim 5. (Original) The method of claim 1 wherein the modification of the first signal comprises at least one of delaying and attenuating.

Claim 6. (Original) The method of claim 1 wherein the processing comprises:

attenuating the third signal when the level of spectral components of the second signal in the second frequency band is below a predetermined level; and

refraining from attenuating the third signal when the level of spectral components of the second signal in the second frequency band is at or above the predetermined level.

Claim 7. (Original) The method of claim 1 wherein the communication system comprises a packet network.

Claim 8. (Previously presented) A method of operating a communication system, the method comprising:

receiving a first signal having a first bandwidth;

processing the first signal to produce a second signal having a second bandwidth that is a subset of the first bandwidth; and

wherein the communication system detects the occurrence of the first signal based upon at least one characteristic of the first signal that is not present in the second signal.

Claim 9. (Original) The method of claim 8 wherein the at least one characteristic comprises the presence of energy in a portion of the relatively greater bandwidth of the first signal, the portion not being present in the relatively lesser bandwidth of the second signal.

Claim 10. (Previously presented) A computer-readable storage, having stored thereon a computer program having a plurality of code sections for operating a

communication system to reduce echo of a narrowband first signal in a wideband second signal, the code sections executable by a processor for causing the processor to perform the operations comprising:

receiving the first signal having spectral components within a first frequency band;

accepting the second signal having spectral components in a second frequency band comprising the first frequency band and having spectral components extending beyond the first frequency band;

removing a modified version of the first signal from the second signal to produce a third signal; and

processing the third signal based upon a level of spectral components of the second signal extending beyond the first frequency band, to further reduce echo of the first signal in the third signal.

Claim 11. (Currently amended) The ~~machine~~computer-readable storage of claim 10 wherein the first frequency band comprises approximately 0 Hz to approximately 4 KHz.

Claim 12. (Currently amended) The ~~machine~~computer-readable storage of claim 10 wherein the second frequency band comprises approximately 4 KHz to approximately 8 KHz.

Claim 13. (Currently amended) The ~~machine~~computer-readable storage of claim 10 wherein the first frequency band and the second frequency band are essentially non-overlapping.

Claim 14. (Currently amended) The ~~machine~~computer-readable storage of claim 10 wherein the modification of the first signal comprises at least one of delaying and attenuating.

Claim 15. (Currently amended) The ~~machine~~computer-readable storage of claim 10 wherein the processing comprises:

attenuating the third signal when the level of spectral components of the second signal in the second frequency band is below a predetermined level; and

refraining from attenuating the third signal when the level of spectral components of the second signal in the second frequency band is at or above the predetermined level.

Claim 16. (Currently amended) The ~~machine~~computer-readable storage of claim 10 wherein the communication system comprises a packet network.

Claim 17. (Currently amended) A signal processing system ~~device~~ for reducing echo of a narrowband first signal in a wideband second signal, the system ~~device~~ comprising:

a first input for receiving a first signal comprising energy in a first frequency band;

a second input for receiving a second signal comprising energy in a second frequency band comprising the first frequency band and having spectral components extending beyond the first frequency band;

an echo canceller that receives the first signal and the second signal, the echo canceller producing a third signal; and

a non-linear processor that attenuates the third signal based upon a level of energy extending beyond the first frequency band of the second input, to further reduce echo of the first signal in the third signal.

Claim 18. (Currently amended) The system device of claim 17 wherein the first frequency band comprises from approximately 0 Hz to approximately 4 KHz.

Claim 19. (Currently amended) The system device of claim 17 wherein the second frequency band comprises from approximately 4 KHz to approximately 8 KHz.

Claim 20. (Currently amended) The system device of claim 17 wherein the first frequency band and the second frequency band are essentially non-overlapping.

Claim 21. (Currently amended) The system device of claim 17 wherein the communication system comprises a packet network.

Claim 22. (New) A signal processing system for reducing echo of a narrowband first signal in a wideband second signal, the system comprising:
at least one processor operable to, at least:

receive a first signal comprising energy in a first frequency band;

receive a second signal comprising energy in a second frequency band comprising the first frequency band and having spectral components extending beyond the first frequency band;

receive the first signal and the second signal, the echo canceller producing a third signal; and

attenuate the third signal based upon a level of energy extending beyond the first frequency band of the second input, to further reduce echo of the first signal in the third signal.

Claim 23. (New) The system of claim 22 wherein the first frequency band comprises from approximately 0 Hz to approximately 4 KHz.

Claim 24. (New) The system of claim 22 wherein the second frequency band comprises from approximately 4 KHz to approximately 8 KHz.

Claim 25. (New) The system of claim 22 wherein the first frequency band and the second frequency band are essentially non-overlapping.

Claim 26. (New) The system of claim 22 wherein the communication system comprises a packet network.